

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2004/050777

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04R3/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 01, 28 February 1995 (1995-02-28) -& JP 06 284492 A (KENWOOD CORP), 7 October 1994 (1994-10-07) For the evaluation of this document the examiner has used the automated translation available at the IPDL website of the JPO. abstract paragraphs '0008!', '0009!', '0011! figure 11	1, 2, 4, 6-8, 15-20
P, X	US 2003/165249 A1 (HIGUCHI SHINICHI) 4 September 2003 (2003-09-04) the whole document figure 5  ----- -/--	1-20

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

28 September 2004

Date of mailing of the International search report

18/10/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 0 332 053 A (YAMAHA CORP) 13 September 1989 (1989-09-13)</p> <p>figure 15 column 22, line 50 - line 53 -----</p>	<p>1-4, 6, 8, 10, 12, 14-20</p>

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Information on patent family members

International Application No

PCT/IB2004/050777

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 06284492	A	07-10-1994	JP 2940587 B2	25-08-1999
US 2003165249	A1	04-09-2003	JP 2003259478 A	12-09-2003
			CN 1443021 A	17-09-2003
			JP 2003324785 A	14-11-2003
EP 0332053	A	13-09-1989	JP 1229598 A	13-09-1989
			JP 1229599 A	13-09-1989
			EP 0332053 A2	13-09-1989
			US 5009281 A	23-04-1991